

WHAT IS CLAIMED IS:

1. A data processing apparatus comprising:
 - a) input means for inputting a plurality of object data;
 - b) first encryption means for encrypting at least a predetermined portion of the object data using first key data to produce encrypted object data;
 - c) generating means for generating seed information which allows said first key data to be obtained therefrom;
 - d) multiplexing means for multiplexing said plurality of object data and the encrypted object data to generate a data stream; and
 - e) transmitting means for individually transmitting said seed information and said data stream.
2. A data processing apparatus according to Claim 1, wherein said first key data periodically changes.
3. A data processing apparatus according to Claim 1, further comprising second encryption means for encrypting said first key data using second key data, wherein said first key data encrypted by said second encryption means is multiplexed by said multiplexing means.

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4. A data processing apparatus according to Claim 3, further comprising third encryption means for encrypting said second key data using third key data, wherein the encrypted second key data is included in said seed information.

5. A data processing apparatus according to Claim 4, further comprising fourth encryption means for encrypting said third key data using fourth key data, wherein the encrypted third key data is included in said seed information.

6. A data processing apparatus according to Claim 1, wherein said input means further comprises coding means for individually coding said plurality of object data.

7. A data processing apparatus according to Claim 6, wherein said coding means performs coding by a coding method conforming to MPEG-4.

8. A data processing apparatus according to Claim 6, wherein said plurality of object data includes at least audio object data, video object data, and scene description information data for enabling the composing of said audio object data and said video object data.

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9. A data processing apparatus according to Claim 1, wherein said data stream includes intellectual property management and protection (IPMP) data for protecting an intellectual property right of the encrypted object data.

10. A data processing apparatus comprising:

a) receiving means for individually receiving a data stream and seed information, said data stream having been generated by the multiplexing of a plurality of object data including object data encrypted using first key data, said seed information allowing said first key data, which is required in descrambling the encrypted object data, to be obtained therefrom;

b) demultiplexing means for demultiplexing said data stream received by said receiving means into individual object data;

c) obtaining means for obtaining said first key data from said seed information received by said receiving means; and

d) descrambling means for descrambling the encrypted object data using said first key data obtained by said obtaining means.

11. A data processing apparatus according to Claim 10,

wherein each of said plurality of object data in said data stream received by said receiving means is coded.

12. A data processing apparatus according to Claim 10, further comprising decoding means for decoding the individual object data demultiplexed by said demultiplexing means and the object data descrambled by said descrambling means.

13. A data processing apparatus according to Claim 12, wherein the plurality of object data decoded by said decoding means includes at least image data, said data processing apparatus further comprising display means for displaying said image data.

14. A data processing apparatus according to Claim 10, wherein said first key data periodically changes.

15. A data processing apparatus according to Claim 10, wherein said data stream includes intellectual property management and protection (IPMP) data for protecting an intellectual property right of the encrypted object data.

16. A data processing apparatus according to Claim 11, wherein each of said plurality of object data in said data

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stream received by said receiving means is coded by a coding method conforming to MPEG-4.

17. A data processing apparatus according to Claim 10, wherein the data stream includes information associated with said first key data, and the information associated with said first key data is generated by encrypting said first key data using second key data.

18. A data processing apparatus according to Claim 17, wherein said seed information includes information generated by encrypting said second key data using third key data.

19. A data processing apparatus according to Claim 18, wherein said seed information includes information generated by encrypting said third key data using fourth key data.

20. A data processing method comprising the steps of:

- a) inputting a plurality of object data;
- b) encrypting at least a predetermined portion of the object data using first key data to produce encrypted object data;
- c) generating seed information which allows said first key data to be obtained therefrom;
- d) multiplexing said plurality of object data and the

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e) individually transmitting said seed information and said data stream.

22. A data processing method according to Claim 21, further comprising the step of encrypting said second key data using third key data, wherein the encrypted second key data is included in said seed information.

24. A data processing method according to Claim 20, wherein said data stream includes intellectual property management and protection (IPMP) data for protecting an intellectual property right of the encrypted object data.

25. A data processing method comprising the steps of:

a) individually receiving a data stream and seed information, said data stream having been generated by the multiplexing of a plurality of object data including object data encrypted using first key data, said seed information allowing said first key data, which is required to descramble the encrypted object data, to be obtained therefrom;

b) demultiplexing said data stream received in said receiving step into individual object data;

c) obtaining said first key data from said seed information received in said receiving step; and

d) descrambling the encrypted object data using said first key data obtained in said obtaining step.

26. A data processing method according to Claim 25, wherein said data stream includes intellectual property management and protection (IPMP) data for protecting an intellectual property right of the encrypted object data.

27. A data processing method according to Claim 25, wherein the data stream includes information associated with said first key data, and the information associated with said first key data is generated by encrypting said first key data using second key data.

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28. A data processing method according to Claim 27, wherein said seed information includes information generated by encrypting said second key data using third key data.

29. A data processing method according to Claim 28, wherein said seed information includes information generated by encrypting said third key data using fourth key data.

30. A computer readable storage medium storing program code for performing a data processing method comprising the steps of:

- a) inputting a plurality of object data;
- b) encrypting at least a predetermined portion of the object data using first key data to produce encrypted object data;
- c) generating seed information which allows said first key data to be obtained therefrom;
- d) multiplexing said plurality of object data and the encrypted object data to generate a data stream; and
- e) individually transmitting said seed information and said data stream.

31. A computer readable storage medium storing program code for performing a data processing method comprising the steps of:

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a) individually receiving a data stream and seed information, said data stream having been generated by the multiplexing of a plurality of object data including object data encrypted using first key data, said seed information allowing said first key data, which is required to descramble the encrypted object data, to be obtained therefrom;

b) demultiplexing said data stream received in said receiving step into individual object data;

c) obtaining said first key data from said seed information received in said receiving step; and

d) descrambling the encrypted object data using said first key data obtained in said obtaining step.

32. A software program comprising program code for performing a data processing method comprising the steps of:

a) inputting a plurality of object data;

b) encrypting at least a predetermined portion of the object data using first key data to produce encrypted object data;

c) generating seed information which allows said first key data to be obtained therefrom;

d) multiplexing said plurality of object data and the encrypted object data to generate a data stream; and

e) individually transmitting said seed information and

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said data stream.

33. A software program comprising program code for performing a data processing method comprising the steps of:

a) individually receiving a data stream and seed information, said data stream having been generated by the multiplexing of a plurality of object data including object data encrypted using first key data, said seed information allowing said first key data, which is required to descramble the encrypted object data, to be obtained therefrom;

b) demultiplexing said data stream received in said receiving step into individual object data;

c) obtaining said first key data from said seed information received in said receiving step; and

d) descrambling the encrypted object data using said first key data obtained in said obtaining step.

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